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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,356	02/24/2004	Lars Karlsson	ADV7-H64	8961

7590

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EXAMINER

MULL, FRED H

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/785,356

Applicant(s)

KARLSSON ET AL.

Examiner

Fred H. Mull

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to under 37 CFR 1.75 because of the following informalities:
In line 4, --(LOB)-- should be inserted after "line of bearing".
2. Claim 10 is objected to under 37 CFR 1.75 because of the following informalities:
In line 9, "." should be replaced by --;--.

The claim recites the limitation "said quality factor" in line 12. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 12 and 13 use the term "error factors". This term is not defined in the specification. It is not clear what are consider error factors. Further, the claim states that error factors are displayed on the display means. It is unclear what in Fig. 4, which is a drawing of the display, is a representation of these error factors.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view of Hobson.

Liu discloses:

a mobile DF set, said set comprising a receiver for receiving incident signal transmissions (30A, Fig. 3);

a line of bearing (LOB) generating system in operative communication with said receiver and configured to generate lines of bearing responsive to said received signal transmissions, determining the position of a transmitter transmitting said transmissions from said lines of bearings, and a display means for displaying said determined position (Fig. 5; p. 3, 1st column, lines 20-36; ¶64, lines 6-30).

Liu fails to disclose displaying an indication of LOB error.

Hobson discloses that "systems which give a precise determination of latitude and longitude to the operator typically fail to provide the operator with information concerning the probable degree of accuracy of the determination." (col. 2, lines 3-7). It is especially important to understand the true nature of the position measurement when the locator is emergency services seeking someone during an emergency situation, as is the case in Liu (¶10-21).

Hobson further discloses:

an LOB error generating system in operative communication with said line of bearing generating system and configured to generate error factors related to said lines of bearing (Fig. 2; col. 4, lines 31-42; col. 6, line 61 to col. 7, line 6);

an probability overlay generating system in operative communication with said LOB error generating system and configured to generate an overlay probability map responsive to said error factors (Figs. 4-7; col. 8, lines 16-31); and

display means for visually displaying said lines of bearing (μ_1 - μ_3 , Figs. 4-7), said error factors and said overlay map (P_1 - P_{11}).

It would have been obvious to include the probability display feature of Hobson to the emergency position displaying system of Liu in order to give emergency services personnel a more accurate picture of where the person seeking emergency services might be, as motivated by Hobson (that "systems which give a precise determination of latitude and longitude to the operator typically fail to provide the operator with information concerning the probable degree of accuracy of the determination." (col. 2, lines 3-7).)

5. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupray in view of Hobson.

Dupray discloses:

a mobile DF set, said set comprising a receiver for receiving incident signal transmissions (148, Fig. 4);

a line of bearing (LOB) generating system in operative communication with said receiver and configured to generate lines of bearing responsive to said received signal transmissions, determining the position of a transmitter transmitting said transmissions from said lines of bearings, and a display means for displaying said determined position (col. 20, lines 51 to col. 21, line 10).

Dupray fails to disclose displaying an indication of LOB error.

Hobson discloses that "systems which give a precise determination of latitude and longitude to the operator typically fail to provide the operator with information concerning the probable degree of accuracy of the determination." (col. 2, lines 3-7). It is especially important to understand the true nature of the position measurement when the locator is emergency services seeking someone during an emergency situation, as is the case in Liu (\P 10-21).

Hobson further discloses:

an LOB error generating system in operative communication with said line of bearing generating system and configured to generate error factors related to said lines of bearing (Fig. 2; col. 4, lines 31-42; col. 6, line 61 to col. 7, line 6);

an probability overlay generating system in operative communication with said LOB error generating system and configured to generate an overlay probability map responsive to said error factors (Figs. 4-7; col. 8, lines 16-31); and

display means for visually displaying said lines of bearing (μ_1 - μ_3 , Figs. 4-7), said error factors and said overlay map (P_1 - P_{11}).

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It would have been obvious to include the probability display feature of Hobson to the emergency position displaying system of Dupray in order to give emergency services personnel a more accurate picture of where the person seeking emergency services might be, as motivated by Hobson (that "systems which give a precise determination of latitude and longitude to the operator typically fail to provide the operator with information concerning the probable degree of accuracy of the determination." (col. 2, lines 3-7).)

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 10-14 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/785353, which has been indicated as allowable, in view of any one of Hodson, Szajnowski, and Jolliffe.

These claims are equivalent to claim 1 in the '353 application with the addition of limitations directed to:

displaying said real-time position on a user display panel; and generating and displaying an probability overlay map responsive to said real-time position and said quality factor on said user display panel.

Hodson (Figs. 2, 4-7; col. 4, lines 31-42; col. 6, line 61 to col. 7, line 6; col. 8, lines 16-31), Szajnowski (Figs. 2, 4-5), and Jolliffe (The inset in the Figure; col. 1, lines 19-21; col. 2, line 49 to col. 3, line 70) disclose displaying said real-time position on a user display panel; and generating and displaying an probability overlay map responsive to said real-time position and said quality factor on said user display panel.

It would have been obvious to include the probability display feature of Hobson to the emergency position displaying system of '353 in order to give emergency services personnel a more accurate picture of where the person seeking emergency services might be, as motivated by Hobson (that "systems which give a precise determination of latitude and longitude to the operator typically fail to provide the operator with information concerning the probable degree of accuracy of the determination." (col. 2, lines 3-7).)

This is a provisional obviousness-type double patenting rejection.

7. The examiner also finds the following reference(s) relevant:

Fryklund, which discloses an error bound overlay (Figs. 6-9; col. 5, lines 23-26).

Applicant is encouraged to consider these documents in formulating their response (if one is required) to this action, in order to expedite prosecution of this application.

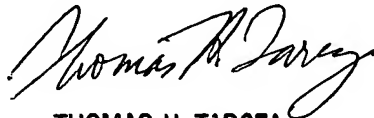
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred H. Mull whose telephone number is 571-272-6975. The examiner can normally be reached on M-F 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred H. Mull
Examiner
Art Unit 3662

fhm


THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
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